



Redistricting Data Program

Presentation to the National Advisory Committee on Racial, Ethnic and Other Populations

May 7, 2021

James Whitehorne, Chief, Census Redistricting and Voting Rights Data Office

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2020

2020 Census Redistricting Data Program

Public Law 94-171

Program Mission: Provide states an opportunity to identify the geographic areas for which specific tabulations of population are needed for legislative redistricting and to deliver high quality data for those areas in a timely manner

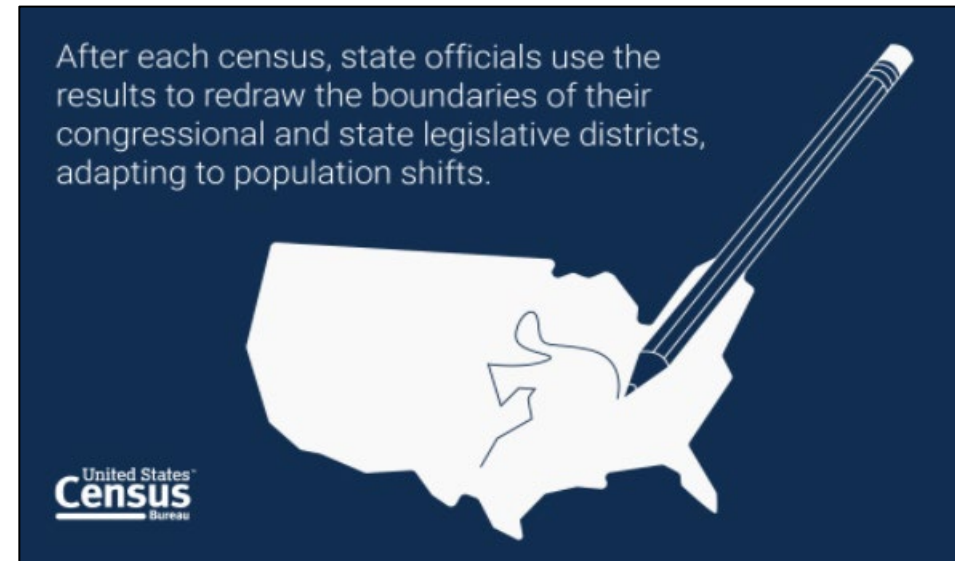
Identified “geographic areas desired”:

- Census Tabulation Blocks
- Voting Districts (e.g. precincts, wards, etc.)
- Legislative and Congressional Districts

Requirements:

- Conduct the program in a non-partisan manner
- Establish program criteria
- Identify required tabulations
- Deliver the tabulations to the governor and the officers or public bodies having initial responsibility for the legislative apportionment or districting of each State no later than 1 year from Census Day*

*Delayed until Sept 30, 2021



2020 Census Redistricting Data Program

The Five Phases of the Program

- **Phase 1: Block Boundary Suggestion Project (BBSP)**
- **Phase 2: Voting District Project (VTD)**
- **Phase 3: Data Delivery**
 - P.L. 94-171 Geographic Support Products
 - P.L. 94-171 Redistricting Data Tabulations
- **Phase 4: Collection of Post-2020 Census Redistricting Plans**
 - 118th Congressional District Plans
 - New State Legislative District Plans
- **Phase 5: Evaluation of the 2020 RDP ([View from the States](#))**
 - Recommendations from the States
 - Design for the 2030 Census Redistricting Data Program

41258 Federal Register / Vol. 79, No. 135 / Tuesday, July 15, 2014 / Notices

DEPARTMENT OF COMMERCE
Bureau of the Census
[Docket Number 140626541-4541-01]
Establishment of the 2020 Census Redistricting Data Program
AGENCY: Bureau of the Census, Department of Commerce.
ACTION: Notice of Program.

SUMMARY: This notice announces and seeks comments on the establishment of the 2020 Census Redistricting Data Program. Required by law, the program provides states the opportunity to specify the small geographic areas for which they wish to receive 2020 decennial population totals for the purpose of reapportionment and redistricting.

DATES: Comments on this notice are by September 5, 2014. The deadline for states to notify the Bureau of their participation in Phase 1, the Block Boundary Suggestion Project (BBSP), is August 1, 2015.

ADDRESSES: Please direct all written comments and requests to the Director, U.S. Census Bureau, 4600 Silver Hill Road, Room 8H-002, Washington DC 20233, telephone (301) 763-4039.

FURTHER INFORMATION CONTACT: Catherine McCully, Chief, Census Redistricting Data Office, U.S. Census Bureau, Room 8H-019, Washington DC 20233, telephone (301) 763-4039.

SUPPLEMENTARY INFORMATION: Under the provisions of Title 13, Section 141(c) of the United States Code (U.S.C.), the Secretary of Commerce (Secretary) is required to provide the "officers or public bodies having initial responsibility for the legislative apportionment or districting of each state . . ." with the opportunity to specify geographic areas (e.g., voting districts) for which they wish to receive decennial census population counts for the purpose of reapportionment or redistricting.

By April 1 of the year following the decennial census, the Secretary is required to furnish the state officials or their designees with population counts for American Indian areas, counties, cities, census blocks, and state-specified congressional, legislative districts, and voting districts.

In accordance with the provisions of 13 U.S.C. 141(c), the Director of the Census Bureau, on behalf of the Secretary of Commerce, announces the establishment of the 2020 Census Redistricting Data Program. The Census Bureau will issue an invitation to the officers or public bodies having initial responsibility for legislative reapportionment and redistricting this fall through the Census Redistricting Data Office inviting states to identify a non-partisan liaison that will work directly with the Census Bureau on the 2020 Census Redistricting Data Program. Once these liaisons are established, the Census Bureau will coordinate communications involving the commencement of the program.

Since the 1990 Census, participation in both the Census Redistricting Data Program's Block Boundary Suggestion Project and Voting District Project (2020 Redistricting Data Program Phases 1 and 2) under Title 13 is voluntary on the part of states. However, if states choose not to participate in Phase 1 and 2, the Census Bureau cannot ensure that the decennial census 2020 tabulation geography will support the redistricting needs of their state.

Phase 1: Block Boundary Suggestion Project (BBSP)
Beginning in the late summer of 2014, the Census Bureau will correspond with the legislative leadership and executive officer of each state to establish a 2020 Census Redistricting Data Program liaison. The Census Bureau will formally announce through a subsequent Federal Register Notice the commencement of Phase 1, the Block Boundary Suggestion Project (BBSP). The purpose of the BBSP is to afford states the opportunity to identify non-standard features often used as electoral boundaries (such as a powerline or stream, rather than a street centerline which might divide voters into two districts) as census block boundaries. The BBSP option affords the state liaison the opportunity to provide suggestions for 2020 census tabulation block boundaries resulting in more meaningful block data for the state. Liaisons are able to work with local officials including county election officers and others to ensure local geography is represented in the 2020 tabulation block inventory. In addition, the liaison, on behalf of the state, will make suggestions for features not desirable as census tabulation blocks. By identifying undesirable features, the liaison may assist the Bureau in reducing the overall number of census tabulation blocks from the 2010 inventory. Beginning in late fall of 2015, states that choose to participate in Phase 1 will begin receiving guidelines and training for providing their suggestions for the 2020 census tabulation blocks as well as their suggestions for exclusion of line segments for consideration in the

Implementation Plans
NIFA plans to consider stakeholder input received from this web-based listening session as well as other written comments in developing a process to implement the Centers of Excellence provision for FY 2015.

Done at Washington, DC this 10th day of July, 2014.
Robert E. Holland,
Acting Associate Director, Programs, National Institute of Food and Agriculture.
[FR Doc. 2014-14614 Filed 7-14-14; 8:45 am]
BILLING CODE 3410-22-P

2020 Census Redistricting Data Program

Phase 1 – Block Boundary Suggestion Project

Review & Submission Cycles:

- Initial Delineation (Dec 2015 – May 2016)
- Verification (Dec 2016 – May 2017)

Activities:

- States had opportunity to influence 2020 tab blocks.
- States also had the opportunity to update other geographic features:
 - Block Boundary Flagging (must holds and do not holds).
 - Boundary corrections and annexations.
 - Add, delete, or modify linear features (i.e. roads, railroads).
 - Add, delete, or modify area features (i.e. parks, college campuses, prison areas).



2020 Census Redistricting Data Program

Phase 1 Participation

Phase 1 – Block Boundary Suggestion Project (BBSP) Participation				
Phase 1 Cycles	Total Number of Participating States*	Percent of Participating States*	Total Number of Counties Updates	Percent of Counties Updated
Initial Delineation (BBSP)	36	69.2%	1151	35.7%
Verification (BBSPV)	34	65.4%	965	30%
BBSP/BBSPV Total Participation	41	78.8%	1413	43.9%

*Including D.C. and Puerto Rico

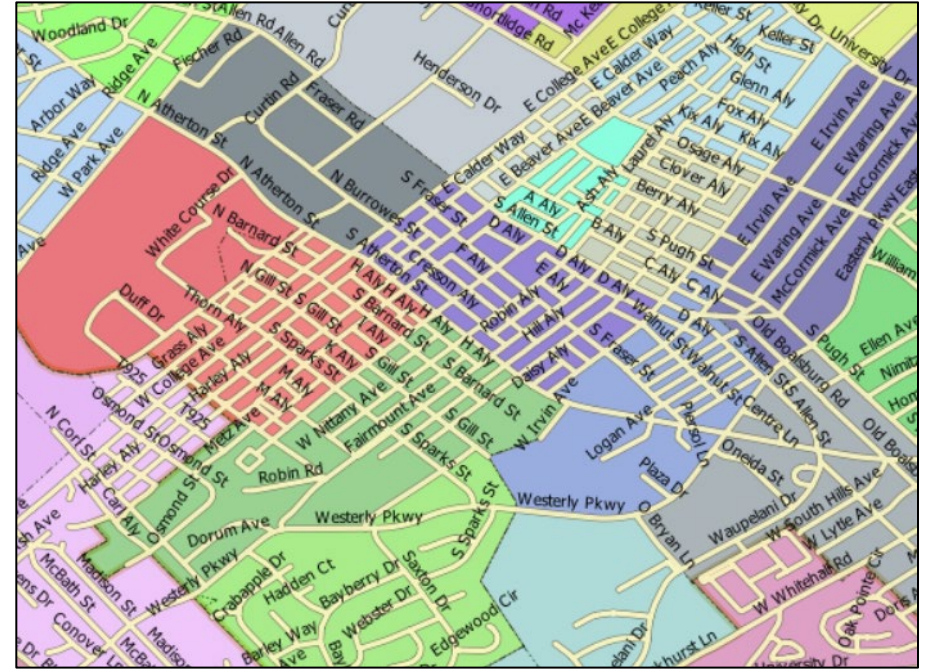
2020 Census Redistricting Data Program Phase 2 – The Voting District Project

Review & Submission Cycles:

- Initial Delineation (Jan 2018 – May 2018).
- Verification 1 (Jan 2019 – May 2019).
- Verification 2 (Jan 2020 – March 2020).

Activities:

- States provided their Election Districts/Precincts/Wards.
- States also had the opportunity to update other geographic features:
 - Block Boundary Flagging (must holds and do not holds).
 - Boundary corrections and annexations.
 - Add, delete, or modify linear features (i.e. roads, railroads).
 - Add, delete, or modify area features (i.e. parks, college campuses, prison areas).



2020 Census Redistricting Data Program

Phase 2 Participation

Phase 2 – Voting Districting Project (VTDP) Participation				
Phase 2 Cycles	Total Number of Participating States*	Percent of Participating States*	Total Number of Counties Updates	Percent of Counties Updated
Initial Delineation (VTD)	45	86.5%	2729	84.7%
Verification I (VTDV1)	47	90.4%	1853	57.5%
Verification II (VTDV2)	37	71.2%	1339	41.6%
VTD/VTDV1/VTDV2 Total Participation	49	94.2%	3099	96.2%

*Including D.C. and Puerto Rico

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Phase 3 – P.L. 94-171 Geographic Support Products

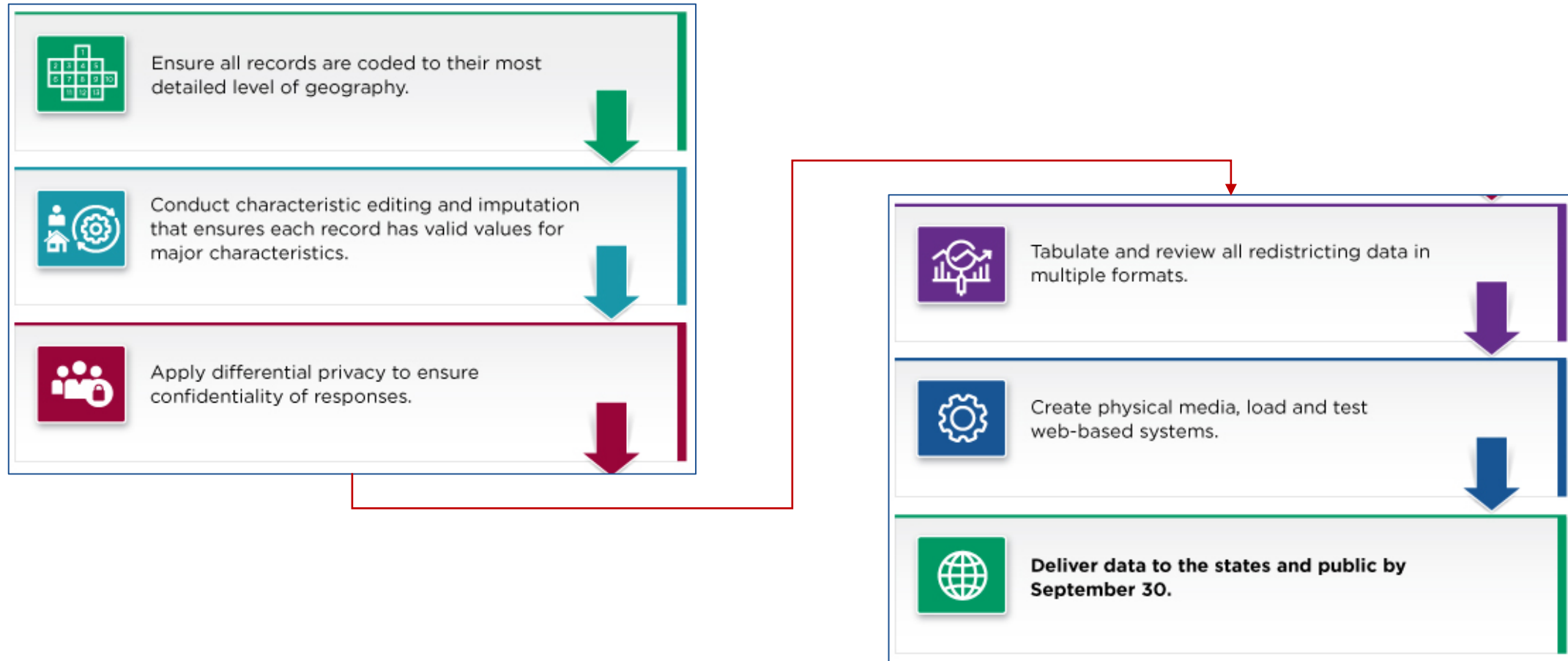
2020 Census P.L. 94-171 Redistricting Data Geographic Products

Product Type	Census Web Address
Shapefiles	https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html
Reference Maps	https://www.census.gov/geographies/reference-maps.html
Block Assignment Files	https://www.census.gov/geographies/reference-files.html
Name Lookup Tables	https://www.census.gov/geographies/reference-files/time-series/geo/name-lookup-tables.html
Block to Block Relationship Files	https://www.census.gov/geographies/reference-files/time-series/geo/relationship-files.html

- Shapefiles – Geographic information system geometry files.
- Reference Maps (PDF only) – County Block; State Legislative with Voting District; Census Tract; School District.
- Block Assignment Files – Tables identifying the blocks used to build different geographic entities.
- Name Lookup Tables – Contain names and codes for geographic areas within a state.
- Block to Block Relationship Files – Crosswalk of 2010 blocks to 2020 blocks.

2020 Census Redistricting Data Program

Phase 3 – P.L. 94-171 Redistricting Data Processing



2020 Census Redistricting Data Program

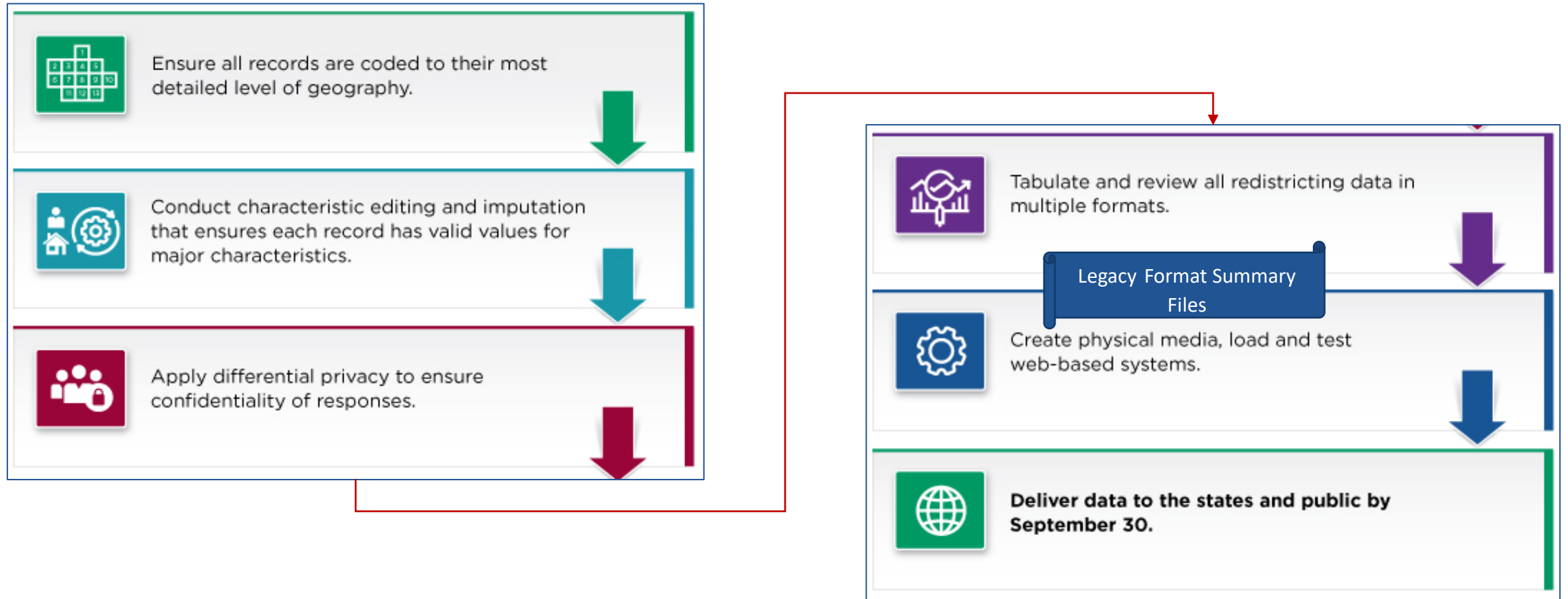
Public Law 94-171 official tools and materials

The user-friendly tools and materials we intend to deliver in September are the DVDs and Flash Drive and our Data.census.gov Data Explorer platform.

- DVDs and Flash Drives – These are what we deliver to the official recipients with an integrated software browsing tool that allows intuitive browsing of the data. They also contain a custom extraction menu that allows for the extraction of large datasets from the device. Those extractions can then be imported easily into a Geographic Information System or database.
- Data Explorer web tool – The data.census.gov Data Explorer is our online data browsing tool for both the official recipients and the public. Users of the Data Explorer platform can access many different census datasets, including the redistricting data. It has custom filters that allow the user to filter on those geographic and characteristic data for which they are interested. For example, a State could filter the data and easily identify the number of voting-age residents by race or ethnicity in each and every block within a census tract, county, or even for the entire state. They can then view, map, and download these datasets once they have set the filters with their choices.

2020 Census Redistricting Data Program

Phase 3 – P.L. 94-171 Redistricting Data Processing



2020 Census Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files

Legacy Format Summary Files

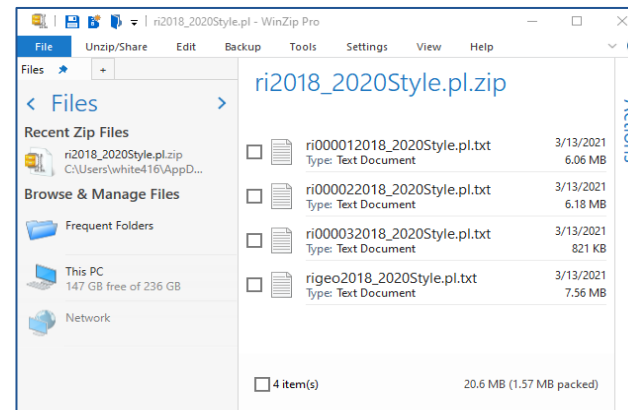
- Product was always part of the 2020 Census product plan
- Format produced and provided to the states since at least Census 2000
- Requires additional handling to properly extract data from this format
- Fully reviewed and cleared for publication by mid-to-late August 2021
- The same data as what will be released in more user-friendly forms by September 30, 2021
 - Used as the source files for the DVD/Flash Drive creation

2020 Census Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files

Physical description

- 2020 formatting is four pipe delimited text files per state contained in a single .ZIP file
 - Geoheader – contains all the geographic codes for the geography include in the redistricting dataset
 - Data Segment 1 – Table P1: Race & Table P2: Hispanic or Latino, and not Hispanic or Latino by Race
 - Data Segment 2 – Table P3: Race for the Population 18 Years and Over & Table P4: Hispanic or Latino, and not Hispanic or Latino by Race for the Population 18 and Over & Table H1 – Housing Status (Occupancy)
 - Data Segment 3 – Table P5: Group Quarters Population by Group Quarters Type
- The geoheader now contains a GEOCODE field so data can be easily joined to geography
- The geoheader must be used together with the data segments in order to access the data
- 2010 formatting was different
 - 3 files in total: 1 geoheader and 2 data segments
 - Geoheader was a fixed width format
 - Data segments were comma delimited



Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files

FILEID	STUSAB	SUMLEV	GEOVAR	GEOCOMP	CHARITER	CIFSN	LOGRECNO	GEOID	GEOCODE	REGION	DIVISION	STATE	STATENS
PLST	RI	040	00	00	000	00	0000001	0400000US44	44	1	1	44	01219835
PLST	RI	050	00	00	000	00	0000002	0500000US44007	44007	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000003	0600000US4400711800	4400711800	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000004	0600000US4400714140	4400714140	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000005	0600000US4400719180	4400719180	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000006	0600000US4400720080	4400720080	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000007	0600000US4400722960	4400722960	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000008	0600000US4400727460	4400727460	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000009	0600000US4400730340	4400730340	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000010	0600000US4400737720	4400737720	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000011	0600000US4400741500	4400741500	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000012	0600000US4400751760	4400751760	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000013	0600000US4400752480	4400752480	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000014	0600000US4400754640	4400754640	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000015	0600000US4400759000	4400759000	1	1	44	01219835

Processing and
Extracting Data

Screenshot of
portion of
geoheader

Link the
tables on the
common
field

FILEID	STUSAB	CHARITER	CIFSN	LOGRECNO	P0010001	P0010002	P0010003	P0010004	P0010005
PLST	RI	000	01	0000001	614053	566407	410378	49589	4269
PLST	RI	000	01	0000002	614053	566407	410378	49589	4269
PLST	RI	000	01	0000003	16558	15627	14940	95	46
PLST	RI	000	01	0000004	17337	14497	6972	1065	38
PLST	RI	000	01	0000005	82619	76703	59720	4340	427
PLST	RI	000	01	0000006	34709	33271	30439	813	18
PLST	RI	000	01	0000007	45484	43068	36592	2762	72
PLST	RI	000	01	0000008	4550	4282	4202	32	5
PLST	RI	000	01	0000009	10135	9854	9468	236	1
PLST	RI	000	01	0000010	27889	26507	23965	646	30
PLST	RI	000	01	0000011	22130	21107	18900	533	403
PLST	RI	000	01	0000012	32664	30410	25408	2319	73
PLST	RI	000	01	0000013	12308	11780	11239	190	0
PLST	RI	000	01	0000014	70765	62475	41186	8770	626
PLST	RI	000	01	0000015	164341	149399	69996	24695	2302
PLST	RI	000	01	0000016	10489	10033	9687	155	0
PLST	RI	000	01	0000017	21740	20874	19697	345	140

Screenshot of
portion of data
segment 1

Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files

FILEID	STUSAB	SUMLEV	GEOVAR	GEOCOMP	CHARITER	CIFSN	LOGRECNO	GEOID	GEOCODE	REGION	DIVISION	STATE	STATENS
PLST	RI	040	00	00	000	00	0000001	0400000US44	44	1	1	44	01219835
PLST	RI	050	00	00	000	00	0000002	0500000US44007	44007	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000003	0600000US4400711800	4400711800	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000004	0600000US4400714140	4400714140	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000006	0600000US4400720080	4400720080	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000007	0600000US4400722960	4400722960	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000011	0600000US4400741500	4400741500	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000012	0600000US4400751760	4400751760	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000013	0600000US4400752480	4400752480	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000014	0600000US4400754640	4400754640	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000015	0600000US4400759000	4400759000	1	1	44	01219835

Screenshot of
portion of
geoheader

Q: I want total population
for my townships in RI.

Township identifier is in
Summary Level field as 060

Total Population field is in data
segment 1 as field P0010001

FILEID	STUSAB	CHARITER	CIFSN	LOGRECNO	P0010001	P0010002	P0010003	P0010004	P0010005
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PLST	RI	000	01	0000002	614053	566407	410378	49589	4269
PLST	RI	000	01	0000003	16558	15627	14940	95	46
PLST	RI	000	01	0000004	17337	14497	6972	1065	38
PLST	RI	000	01	0000005	82619	76703	59720	4340	427
PLST	RI	000	01	0000006	34709	33271	30439	813	18
PLST	RI	000	01	0000007	45484	43068	36592	2762	72
PLST	RI	000	01	0000008	4550	4282	4202	32	5
PLST	RI	000	01	0000009	10135	9854	9468	236	1
PLST	RI	000	01	0000010	27889	26507	23965	646	30
PLST	RI	000	01	0000011	22130	21107	18900	533	403
PLST	RI	000	01	0000012	32664	30410	25408	2319	73
PLST	RI	000	01	0000013	12308	11780	11239	190	0
PLST	RI	000	01	0000014	70765	62475	41186	8770	626
PLST	RI	000	01	0000015	164341	149399	69996	24695	2302
PLST	RI	000	01	0000016	10489	10033	9687	155	0
PLST	RI	000	01	0000017	21740	20874	19697	345	140

Screenshot of
portion of data
segment 1

Shape
your future
START HERE >

Redistricting Data Program

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FILEID	STUSAB	SUMLEV	GEOVAR	GEOCOMP	CHARITER	CIFS	LOGRECNO	GEOID	GEOCODE	REGION	DIVISION	STATE	STATENS
PLST	RI	040	00	00	000	00	0000001	0400000US44	44	1	1	44	01219835
PLST	RI	050	00	00	000	00	0000002	0500000US44007	44007	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000011	0600000US4400741500	4400741500	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000012	0600000US4400751760	4400751760	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000013	0600000US4400752480	4400752480	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000014	0600000US4400754640	4400754640	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000015	0600000US4400759000	4400759000	1	1	44	01219835

Screenshot of
portion of
geoheader

Q: I want total population
For my townships in RI.

Query: From the GEOHEADER file
give me records where **SUMLEV = 060**. Output the corresponding
GEOCODE, **NAME** (not shown on
slide) and **P0010001**

FILEID	STUSAB	CHARITER	CIFS	LOGRECNO	P0010001	P0010002	P0010003	P0010004	P0010005
PLST	RI	000	01	0000001	614053	566407	410378	49589	4269
PLST	RI	000	01	0000002	614053	566407	410378	49589	4269
PLST	RI	000	01	0000003	16558	15627	14940	95	46
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PLST	RI	000	01	0000008	4550	4282	4202	32	5
PLST	RI	000	01	0000009	10135	9854	9468	236	1
PLST	RI	000	01	0000010	27889	26507	23965	646	30
PLST	RI	000	01	0000011	22130	21107	18900	533	403
PLST	RI	000	01	0000012	32664	30410	25408	2319	73
PLST	RI	000	01	0000013	12308	11780	11239	190	0
PLST	RI	000	01	0000014	70765	62475	41186	8770	626
PLST	RI	000	01	0000015	164341	149399	69996	24695	2302
PLST	RI	000	01	0000016	10489	10033	9687	155	0
PLST	RI	000	01	0000017	21740	20874	19697	345	140

Screenshot of
portion of data
segment 1

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SUMLEV	GEOCODE	NAME	P0010001
060	4400711800	Burrillville town	16558
060	4400714140	Central Falls city	17337
060	4400719180	Cranston city	82619
060	4400720080	Cumberland town	34709
060	4400722960	East Providence city	45484
060	4400727460	Foster town	4550
060	4400730340	Glocester town	10135
060	4400737720	Johnston town	27889
060	4400741500	Lincoln town	22130
060	4400751760	North Providence town	32664
060	4400752480	North Smithfield town	12308
060	4400754640	Pawtucket city	70765
060	4400759000	Providence city	164341
060	4400764220	Scituate town	10489
060	4400766200	Smithfield town	21740
060	4400780780	Woonsocket city	40335

Screenshot of results

Query Results: From the GEOHEADER file give me records where SUMLEV = 060 and output the corresponding GEOCODE, NAME and P0010001

Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files

Support

- Consultations with major software vendors, NCSL, and individual states
- 2020 Census State Redistricting (P.L. 94-171) Summary File Technical Documentation
- Prototype P.L. 94-171 Redistricting Data Summary File
 - Content from the 2018 End-to-End Census Test in Providence County, RI
 - In the format planned for the 2020 Census Legacy Format Summary Files
 - <https://www.census.gov/programs-surveys/decennial-census/about/rdo/program-management.html#P3>
- Header File – Excel Format
 - Tabs for the header of each file which can be imported into other software or used within Excel
 - Tabs with plain English definition for the headers
- Microsoft Access database shell
 - Tables shells for each file
 - Example queries to demonstrate query logic and provide practice
 - Illustrated step-by-step guide on how to use the Microsoft Access database shell
- 4 • SAS script for import of the Legacy Format Summary File

Thank You

James Whitehorne

Chief - Census Redistricting & Voting Rights Data Office

Email: rdo@census.gov

Phone: 1-301-763-4039

Web: www.census.gov/rdo

U.S. Department of Commerce

U.S. Census Bureau

4600 Silver Hill Rd.

Suitland, Maryland 20746

2020 Census Redistricting Data Program

Questions for NAC

- After the redistricting data is released in September, we will begin the long-term planning for the 2030 Census Redistricting Data Program.
 - Are there changes you would like us to consider integrating into the that planning for the 2030 redistricting data products?
 - Do you continue to expect to see and need the full 63 permutations of race in the redistricting data files? If race and ethnicity were combined into a single question, and possible additional categories were added, would you still need to see that full permutation?
 - How important is block level data from the redistricting dataset to the work you do, redistricting or otherwise? Could your work still be accomplished without census providing block level data?